

REMARKS

Summary of the Office Action

In the Office Action dated November 13, 2003, claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over allegedly Applicant admitted prior art (AAPA) in view of U.S. Patent No. 6,297,862 to Murade.

Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA and Murade as applied to claims 1-20 above, and further in view of US 6,266,117 to Yanagawa et al.

Summary of Applicants' response

Applicants respectfully traverse the 35 U.S.C. §103 rejections of claims 1-21 for the following reasons.

Claims 1-21 contain patentable subject matter

Applicants respectfully traverse the 35 U.S.C. § 103 rejections of claims 1-21 because no *prima facie* case of obviousness has been established. As instructed by MPEP §2143, “[t]o establish a *prima facie* case of obviousness, . . ., there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” Applicants respectfully submit that there is no showing of proper motivation or suggestion to modify or combine cited reference teachings.

Independent claims 1 and 11 each recite, among other features, the features of “a light-shielding member overlapping the switching device and extending from an end at the pixel electrode side of a metal thin film provided within the switching device into the pixel area, the

light shielding member covering and extending past all sides of the metal thin film with a margin sufficient to block light incident on the metal thin film (Emphasis added)," or like features.

Further, independent claims 5, 9, 15, and 19 each recite, among other features, the features of "a light-shielding member overlapping the charging device and extending from an end at the pixel electrode side of the metal thin film into the pixel area with a margin sufficient to block light incident on the metal thin film (Emphasis added)," or like features.

Murade fails to teach or suggest how the allegedly Applicant admitted prior art (AAPA) can be modified to extend the black matrix "past all sides of the metal thin film with a margin sufficient to block light incident on the metal thin film. As described in the instant application at paragraph [0031], for example, due to this feature, the present invention can prevent the reflection of light by the metal film, such as drain electrode, thereby further improving contrast.

In Murade, the black matrix facing the scan line and data line is to prevent a leak current due to a light incident to the channel region from being generated. Murade uses the black matrix to prevent the light from being incident to the channel region. In particular, Murade uses the data line as the second light-shielding film. Further, as described in column 2, lines 6-9, column 15, lines 12-17, and column 16, lines 36-38, for example, Murade suggests that when an additional metal structure, such as first light shielding layer 7, is present below the transistor, the black matrix 6 needs not be provided. Therefore, Murade suggests removal of the black matrix over the transistor when an additional metal structure is present adjacent the transistor. This is understandable because, as stated above, Murade is primarily concerned with light incident on the channel region and the resultant increase in the leakage current. There is no discussion in

Murade with regard to the refection of light caused by the metallic structure, which is in the transistor or storage capacitance, or with regard to the adverse consequence of such a reflection. According to Murade's teaching, if there is some additional metallic structure that covers the channel region, then, no additional shielding of light by the black matrix is needed. Such a teaching is plainly contrary to the purposes and the features of the invention claimed in the instant application. Accordingly, Applicants respectfully submit that Murade does not provide a proper motivation or suggestion to modify the alleged Applicant admitted prior art (AAPA).

Moreover, Murade teaches away the proposed modification of the AAPA because as described above Murade suggests removal of the black matrix (light shielding layer) when an additional metallic structure is present. Thus, the combination of the AAPA with the teaching of Murade would result in a structure that has no light shielding layer coverage above the metal layer in the transistor, not the invention as recited in the claims. As instructed by MPEP § 2145 X.D.2., “[i]t is improper to combine references where the references teach away from their combination.”

In view of the foregoing, Applicants respectfully submit that independent claims 1, 5, 9, 11, 15, and 19 are allowable at least because there is no showing of proper motivation or suggestion to modify or combine the cited reference teachings .

Dependent claims 2-4, 6-8, 10, 12-14, 16-18, and 20-21 are allowable at least because of their respective dependencies upon allowable claims 1, 5, 9, 11, 15, and 19 and for the additional features they recite. Accordingly, Applicants respectfully request that the rejections of the claims under 35 U.S.C. § 103 be withdrawn.

Conclusion

In view of the foregoing, Applicants respectfully request reconsideration of this application. Should the Examiner believe that anything further would be desirable to place this application into even better condition for allowance, the Examiner is invited to contact the Applicants' undersigned representative by telephone at (202) 739-5660.

EXCEPT for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. §1.136(a)(3).

Respectfully submitted

MORGAN, LEWIS & BOCKIUS LLP

By:


Masao Yoshimura
Reg. No. 52,526

Dated: February 13, 2003

Customer Number 009629
MORGAN, LEWIS & BOCKIUS LLP
1111 Pennsylvania Avenue, N.W.
Washington, DC 20004
202-739-3000